## **ABSTRACT**

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The present invention relates generally to qualifying trust in the exchange of electronic documents. During the course of an electronic document exchange, information on all document transmissions is recorded, separate from the documents themselves. A weight  $\alpha$  is assigned to indicate the degree to which it is believed that a document based on another has in some way validated the earlier document.

A total is calculated for each participant in the document exchange, based upon the number of times documents from each other participant are referenced. Each level of indirection in the counting process is weighted by a factor of  $\alpha$ . The values calculated for each participant indicate the degree of trust placed with each participant by the others. The sum of these trust vectors, weighted by role weighting values, indicates the degree of trust placed in each participant.

A reference counting procedure is performed across document references to determine for each participant which of their documents where referenced the most, taking into consideration levels of reference indirection and weighting factors, and thereby determining in which participants and documents the most trust is placed.